UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/240,509	01/29/1999	HARI KALVA	AP31569	7416

21003   7590   03/11/2002

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EXAMINER
PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
2152	10

DATE MAILED: 03/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		09/240,509	KALVA ET AL.
		Examiner	**Art Unit**	
		B. PRIETO	2152	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2002*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 February 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)	4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5)☐ Notice of Informal Patent Application (PTO-152)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6)☐ Other: .

Detailed Action

1.   This communication is in response to request for reconsideration filed 01/10/02, claims 1-14 remain pending.

2.   Quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.

3.   Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woods et. al. (Woods) Wired for Speed: Efficient Routes on VRML 2.0.

Regarding claims 8 and 1, Woods teaches features of invention substantially as claimed; Woods teaches a system/method supporting communicating command information between a VRL nodes for sending (source) and receiving (destination) data via routes (section 2.1-2.2), said nodes include a player VRML browser (client) (abstract), interactive communication between said nodes consisting of request-response model (section 2.3, i.e. client-server model), comprising:

generating (firing) a command message (command route) associated with a user action or system event associated with streams containing scene description information (e.g. scene source nodes, etc.), command message including a command (e.g. event fields, see sections 1.1-2.2, command routes, section 4.1 commands, i.e. execute fields), a command descriptor (integer identifier, see section 4.1), and one of a server route (command routes-rendering scene means, section 2.2-2.3) and a command node (execute event sink field i.e. command route node, see 2.1 and 4.1); wherein event source/sink routes support interaction between a source of the route and a destination of the route (see section 2.1, such as firing a "TimeSensor" node scene in the interaction VRML model, interactivity-model is request-response between a requesting source and a responding destination nodes, section 2.3); and

transmitting the command message upon occurrence of a user or system triggering event (e.g. Touchsensor node scene, see 2.1 section, user or system events, see 2.2, source/sink route, user or system triggering event, message (request) transmission, message (response) receipt, using event source/sink routes, section 2.3, said messages to support said node scenes), however

Woods teachings of a client node (Cosmo Player, as a VRML browser) and a provider node interacting with said supporting interactive communication, as discussed above, is not explicitly denoted a "client" and "server" interaction;

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize Woods teachings to implement the server entity providing the same functionalities as claimed, motivation would be to provide a robust designing got efficient handling of network routes and events, as taught by Woods.

Regarding claims 2-3, however Woods does not explicitly teach wherein said the generating command message, discussed above is consistent with local interactivity model defined in MPEG-4. Admittance of prior art (MPEP § 2129) Applicant disclosure states: "MPEP-4 essentially uses two modes of interactivity: local and remote. Local interactivity can be fully implemented using the native event architecture of *MPEG-4 interactivity can be fully implemented using the native event architecture of MPEG-4 BIFS (Binary Format for Scenes), which is based on the VRML 2.0 ROUTEs design* and documented in Part 1 of the MPEG-4 specification (Systems), see page 1, lines 26-33. It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize an interactivity model defined in MPEG-4, the new VRML 2.0 specification, enables much more dynamic and interactive environments supported by the convergence of these technologies; motivation would be to provide via MPEG-4 a real service on desktop application enhancing the tele-presence and shared virtual reality space technology (see Ref A).

Regarding claims 4-5, the triggering event is a mouse clicks and wherein the triggering event is a timer signal (Woods, see 2.1 section).

Regarding claims 6-7, command information is transmitted from the server to the client and wherein command information is transmitted from the client to the server (Woods, message between a provider node and a player VRML browser client node, request/response, see 2.1-2.3, request e.g. change state of current scene, response update and rendering requested scene)

Regarding claims 9-14, the claim comprise the system in accordance to the method disclosed on claims 1-7, respectively same rationale is applicable.

Response to arguments

4. Applicant argues (A) prior art of record Woods discloses no interaction between a client and a server by transmitting generated commands messages upon occurrence of a triggering event, prior art does not teach providing interaction between "clients and servers".

5. In response to argument A, Woods teaches the use of event source/sink routes between VRML nodes for sending/receiving data; communication between nodes supports an interactive communication between said nodes by means of a *request-response model* (section 2.3, this is a *"client" requester "server" provider interactive communication)*; wherein a Player-VRML (client) browser is configured with means for firing a generated a command message upon a *triggering system event* such as a *TimeSensor or a mouse click* (section 2.1); wherein the conceptual model of the message is request-response (section 2.3) and one of a server route (*command routes-rendering scene means*, section 2.2-2.3, see 2.2 *routes between source/destination nodes in the scene, generating user event in the scene)*; wherein event source/sink routes support interaction *between a source node of the route and a destination node* of the route message (see section 2.1), interactivity-model is request-response between a *requesting source and a responding destination*, section 2.3); It is respectfully noted that according to applicant's specifications *"client" and "server"* as defined by the specifications are entities, processes (page 2, lines 1-4), or applications, with sending/receiving capabilities, (see page 2, lines 18-23).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Prieto, B.** whose telephone number **is (703) 305-0750.** The Examiner can normally be reached on Monday-Friday from 6:30 to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **Mark H. Rinehart** can be reached on **(703) 305-4815.** The fax phone number for the organization where this application or proceeding is assigned is **(703) 308-6606.** Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is **(703) 305-3800/4700.**

Any response to this final action should be mailed to:
> **Box AF**
>> Commissioner of Patents and Trademarks
>> Washington, D.C. 20231
> **or faxed to:**
>> (703) 746-7238, (for Official After-final communications; please mark "EXPEDITED PROCEDURE", for other Official communications; (703) 746-7239)
> **Or:**
>> (703) 465-7240 (for Non-Official, Draft communications, status
> query, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

B. Prieto
Patent Examiner
March 8, 2002

MEHMET B. GECKIL
PRIMARY EXAMINER